

**What Is Claimed Is:**

- 1           1.       A method to facilitate accessing communication queues using a  
2 public network, comprising:  
3           generating a message at a client;  
4           formatting the message in a publicly available format;  
5           communicating the message across the public network to a web server;  
6           receiving the message at the web server;  
7           transforming the message to a database specific format; and  
8           passing the message to a queue within a database server across a  
9 proprietary network.
- 1           2.       The method of claim 1, wherein the publicly available format  
2 includes extensible markup language (XML).
- 1           3.       The method of claim 1, wherein communicating the message  
2 across the public network includes communicating with one of, hypertext transfer  
3 protocol (HTTP), simple mail transfer protocol (SMTP), and file transfer protocol  
4 (FTP), whereby the message can be communicated across a firewall.
- 1           4.       The method of claim 1, further comprising sending the message  
2 from the queue to a recipient.
- 1           5.       The method of claim 1, further comprising publishing the message  
2 from the queue to a list of recipients.

1           6.     The method of claim 1, further comprising requesting to receive a  
2     stored message from the queue.

1           7.     The method of claim 1, further comprising registering to receive  
2     notification of new messages from the queue.

1           8.     The method of claim 1, wherein the client is a second queue in a  
2     second database.

1           9.     The method of claim 1, wherein the public network is the Internet.

1           10.    The method of claim 1, further comprising authenticating the client  
2     to the web server.

1           11.    The method of claim 1, further comprising guaranteeing  
2     transactional integrity of a transaction including multiple round trips, wherein  
3     operations of the transaction are committed and aborted as a unit.

1           12.    The method of claim 1, further comprising guaranteeing exactly  
2     once delivery of the message during propagation from a first queue to a second  
3     queue, whereby exactly once delivery is ensured by using a sequence number and  
4     not by a two phase commit.

1           13.    A computer-readable storage medium storing instructions that  
2     when executed by a computer cause the computer to perform a method to  
3     facilitate accessing communication queues using a public network, the method  
4     comprising:

5 generating a message at a client;  
6 formatting the message in a publicly available format;  
7 communicating the message across the public network to a web server;  
8 receiving the message at the web server;  
9 transforming the message to a database specific format; and  
10 passing the message to a queue within a database server across a  
11 proprietary network.

1 14. The computer-readable storage medium of claim 13, wherein the  
2 publicly available format includes extensible markup language (XML).

1 15. The computer-readable storage medium of claim 13, wherein  
2 communicating the message across the public network includes communicating  
3 with one of, hypertext transfer protocol (HTTP), simple mail transfer protocol  
4 (SMTP), and file transfer protocol (FTP), whereby the message can be  
5 communicated across a firewall.

1 16. The computer-readable storage medium of claim 13, the method  
2 further comprising sending the message from the queue to a recipient.

1 17. The computer-readable storage medium of claim 13, the method  
2 further comprising publishing the message from the queue to a list of recipients.

1 18. The computer-readable storage medium of claim 13, the method  
2 further comprising requesting to receive a stored message from the queue.

1           19.     The computer-readable storage medium of claim 13, the method  
2 further comprising registering to receive notifications from the queue.

1           20.     The computer-readable storage medium of claim 13, wherein  
2 messages are propagated from a first queue to a second queue.

1           21.     The computer-readable storage medium of claim 13, wherein the  
2 public network is the Internet.

1           22.     The computer-readable storage medium of claim 13, the method  
2 further comprising authenticating the client to the web server.

1           23.     The computer-readable storage medium of claim 13, the method  
2 further comprising proxying as a database user by the web server on behalf of an  
3 Internet user.

1           24.     An apparatus to facilitate accessing communication queues using a  
2 public network, comprising:  
3           a generating mechanism that is configured to generate a message at a  
4 client;  
5           a formatting mechanism that is configured to format the message in a  
6 publicly available format;  
7           a communicating mechanism that is configured to communicate the  
8 message across the public network to a web server;  
9           a receiving mechanism that is configured to receive the message at the  
10 web server;

11 a transforming mechanism that is configured to transform the message to a  
12 database specific format; and  
13 a passing mechanism that is configured to pass the message to a queue  
14 within a database server across a proprietary network.

1 25. The apparatus of claim 24, wherein the publicly available format  
2 includes extensible markup language (XML).

1 26. The apparatus of claim 24, wherein communicating the message  
2 across the public network includes communicating with one of, hypertext transfer  
3 protocol (HTTP), simple mail transfer protocol (SMTP), and file transfer protocol  
4 (FTP), whereby the message can be communicated across a firewall.

1 27. The apparatus of claim 24, further comprising a sending  
2 mechanism that is configured to send the message from the queue to a recipient.

1 28. The apparatus of claim 24, further comprising a publishing  
2 mechanism that is configured to publish the message from the queue to a list of  
3 recipients.

1 29. The apparatus of claim 24, further comprising a requesting  
2 mechanism that is configured to request receiving a stored message from the  
3 queue.

1 30. The apparatus of claim 24, further comprising a registering  
2 mechanism that is configured to register to receive notifications from the queue.

1           31.     The apparatus of claim 24, wherein the client is a second queue in  
2     a second database.

1           32.     The apparatus of claim 24, wherein the public network is the  
2     Internet.

1           33.     The apparatus of claim 24, wherein exactly once delivery of  
2     messages to a second queue is guaranteed across the public network, whereby the  
3     public network handles recovery from network and database failures.

1           34.     The apparatus of claim 24, further comprising an authenticating  
2     mechanism that is configured to authenticate the client to the web server.